NTSB General Aviation Safety Forum
Content, Quality and Consistency of Pilot Training

Student Pilot Curriculum

Issues & Trends Affecting Safety

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- Issues related to student pilot curriculum deal with "who" and "how many" are involved with the process

    1. Resources

    2. Required knowledge and skill

    3. Learning challenges

Resources

- Time – busy lives and heavy workloads make time one of the biggest obstacles for student pilots.

- Money – today's average private pilot certificate costs almost $9,000.

- Flight Instructors – fewer CFIs are available to provide training around the country.

- Training Aircraft – costs continue to rise, legacy aircraft are getting old, and schools are operating mixed fleets requiring various training scenarios.

- Pilot Population – declining by as much as 64%.

Required Knowledge and Skill

- Training Course Outline (TCO) is premise for all training

- Cohesive training in spite of mandates from various stakeholders

- Dynamic requirements

Learning Challenges

- "How" to teach more than "what" to teach.

- Stretching personal limits in a training environment.

- Training the trainer.

- Relevant testing will result in meaningful training.

- ESL student pilots training in the U.S.

- Keeping students engaged in the flight training process.

- Trends related to student pilot curriculum deal with "how" instead of "what" is involved with the process

  1. Mission-based curriculum

  2. Student-centered learning

  3. Learning management systems

Mission-Based Curriculums

- Pilots are not necessarily climbing a sequential ladder of certificates and ratings.

- Curriculums are being created to suit a defined mission.

- Ab initio training no longer exclusive to career-track pilots.

- Efficient and effective curriculum and establishes a safety mindset.

Student-Centered Learning

- Curriculums are based on student goals.

- More self-study, eLearning, and simulator use.

- Integrated flight training is no longer the primary method.

- An emotional attachment to the flight training process promotes safety by making the requirements personal.

Learning Management Systems

- Maneuvers-based training: A strong foundation is needed as much now as ever.

- Scenario-based training: Connecting the foundational topics.

- Students must learn to prioritize information so safe decisions can be made.

- "Available safety" needs to equal "actual safety."

- Schools are moving to digital delivery for training.

Student Pilot Curriculum Issues & Trends

- One-size fits all training no longer applies.

- Training fleets and student pilot goals vary widely.

- Careful analysis is required to match the curriculum to the pilot applicant and circumstances.

- It is critical to understand the issues and trends to nurture the pilot community.

- A healthy industry will improve safety.